06-29-04

AF/3622 IFW

Atty. Dkt. No. 059729-0111

OIPE JC10 JUN 28 2004 PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kazue SAKO

Title: ELECTRONIC TENDER SYSTEM

Appl. No.: 09/472,900

Filing Date: 12/28/1999

Examiner: M. Fisher

Art Unit: 3629

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: **Mail Stop Appeal Brief: Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

EV 42055084 US (Express Mail Label Number)

June 28, 2004 (Date of Deposit)

Ruthie Vallejo (Printed Name)

(Signature)

AMENDMENT TRANSMITTAL

Mail Stop: Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is a brief on appeal in the above-identified application.

[X] Brief on Appeal (In triplicate).

[ ] Extension of Time.

[ ] Applicant hereby petitions for an extension of time under 37 C.F.R. §1.136(a) for the total number of months checked below:

[ ]	Extension for response filed within the first month:	$110.00	$0.00
[ ]	Extension for response filed within the second month:	$420.00	$0.00
[ ]	Extension for response filed within the third month:	$950.00	$0.00
[ ]	Extension for response filed within the fourth month:	$1,480.00	$0.00
[ ]	Extension for response filed within the fifth month:	$2,010.00	$0.00
		EXTENSION FEE TOTAL:	$0.00
[ ]	Statutory Disclaimer Fee under 37 C.F.R. 1.20(d):	$110.00	$0.00
		CLAIMS, EXTENSION AND DISCLAIMER FEE TOTAL:	$0.00
[ ]		Small Entity Fees Apply (subtract ½ of above):	$0.00
[X]	Appeal Brief Fee under rule 17(c):		$330.00
		TOTAL FEE:	$330.00

[ ] Please charge Deposit Account No. 50-0872 in the amount of $330.00. A duplicate copy of this transmittal is enclosed.

[**X**] A check in the amount of $330.00 is enclosed.

[**X**] The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date 6-28-04

By Lin C. [signature] for #44,740

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OIPE JC10 JUN 28 2004 PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kazue SAKO

Title: ELECTRONIC TENDER SYSTEM

Appl. No.: 09/472,900

Filing Date: 28 December 1999

Examiner: M. FISHER

Art Unit: 3629

CERTIFICATE OF EXPRESS MAILING

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June 28, 2004 (Date of Deposit)

Ruthie Vallejo (Printed Name)

(Signature)

APPEAL BRIEF UNDER 37 CFR 1.192(a)

Mail Stop: Appeal Brief- Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby appeals the Rejection issued 27 January 2004.

1. Real Party in Interest

The present application is assigned to NEC Corporation of Tokyo, Japan.

2. Related Appeals and Interferences

There are no known related appeals or interferences.

3. Status of claims

Claims 1-14 are pending. All of claims 1-14 are rejected over prior art. Claims 1-11 are rejected for the third time over the Franklin reference. All rejections are appealed.

4. Status of Amendments

No amendments have been made after the rejection.

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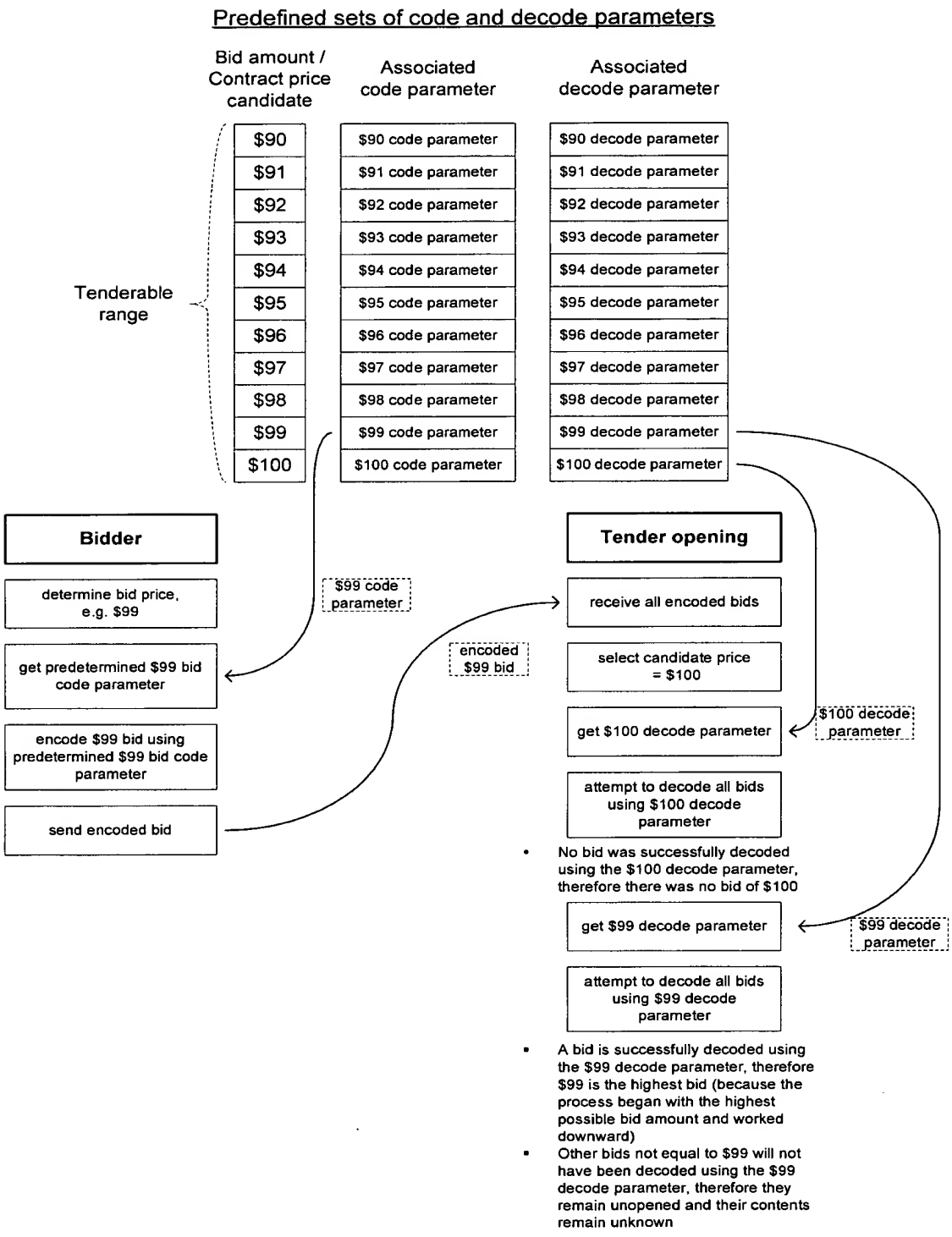
5. Summary of the Invention

The claimed invention is directed to electronic auction systems (page 1, lines 4-6). The purpose of the claimed invention is to determine a winning bid without revealing the contents of the non-winning bids (page 3, lines 3-9).

This is achieved by encoding each bid using a "code parameter" (e.g. a public key) that is uniquely associated with the amount of the bid (e.g., page 5, lines 8-19). In other words, all bids of a given amount are encoded using the same code parameter, so that if the corresponding decode parameter for that amount is applied to all the bids, bids of that given amount will be successfully decoded, and bids that are not of that given amount will not be successfully decoded (because they were encoded using a different code parameter specific to their own bid amount).

In the claimed invention, the bid receiver preserves the anonymity of non-winning bids by taking advantage of this coding scheme. Specifically, the bid receiver tries to open all received bids using the decode parameter for the highest or lowest possible bid (depending on whether it wants to identify the highest or the lowest bid) (e.g., page 5, line 20 – p.6, line 6). If no bid can be decoded using that decode parameter, then the decode parameter for the next highest or lowest bid is obtained and used in an attempt to decode all bids. This process is repeated until one of the bids is finally decoded (e.g., page 6, lines 6-11). Using this method, only the highest or lowest bid is decoded, while the other bids are never decoded and therefore remain "unopened."

The following is an illustration of an example of the claimed invention, in which the bid receiver determines the highest bid, and where the predetermined range of bid prices encompasses bids from $90 to $100 dollars in $1 increments:


Predefined sets of code and decode parameters
Bid amount / Contract price candidate
Associated code parameter
Associated decode parameter
Tenderable range
$90
$91
$92
$93
$94
$95
$96
$97
$98
$99
$100
$90 code parameter
$91 code parameter
$92 code parameter
$93 code parameter
$94 code parameter
$95 code parameter
$96 code parameter
$97 code parameter
$98 code parameter
$99 code parameter
$100 code parameter
$90 decode parameter
$91 decode parameter
$92 decode parameter
$93 decode parameter
$94 decode parameter
$95 decode parameter
$96 decode parameter
$97 decode parameter
$98 decode parameter
$99 decode parameter
$100 decode parameter
Bidder
determine bid price, e.g. $99
get predetermined $99 bid code parameter
encode $99 bid using predetermined $99 bid code parameter
send encoded bid
$99 code parameter
encoded $99 bid
Tender opening
receive all encoded bids
select candidate price = $100
get $100 decode parameter
$100 decode parameter
attempt to decode all bids using $100 decode parameter
No bid was successfully decoded using the $100 decode parameter, therefore there was no bid of $100
get $99 decode parameter
$99 decode parameter
attempt to decode all bids using $99 decode parameter
A bid is successfully decoded using the $99 decode parameter, therefore $99 is the highest bid (because the process began with the highest possible bid amount and worked downward)
Other bids not equal to $99 will not have been decoded using the $99 decode parameter, therefore they remain unopened and their contents remain unknown

In this example, the system (comprised of a bidder sub-system and a tender opening sub-system) uses a predefined set of code and decode parameters for bid values in increments of $1 in the tenderable range of $90 to $100. As seen at the top part of the drawing, for each bid amount (also referred to as a "contract price candidate") there is a corresponding code parameter (e.g. public key) and decode parameter (e.g. the private key that corresponds to the public key) that must be used for encoding and decoding bids of that amount. As specified in the claims, the code and decode parameters are different for each respective bid amount. In other words, each code/decode parameter pair is uniquely associated with its corresponding bid amount.

The bottom portion of the drawing shows how this coding scheme is used in practice. At the left-hand portion, a bidder sub-system determines a bid price that will be offered, in this case, $99. The bidder sub-system obtains the predetermined code parameter for the $99 bid, and encodes the bid information using the $99 bid code parameter. The bid is then sent to the tender opening sub-system.

For purposes of this example, it is assumed that the tender opening sub-system wishes to identify the highest bid among all received bids. The tender opening sub-system receives the illustrated $99 bid and other bids from other bidder sub-systems. To determine the winning bid, the tender opening sub-system attempts to decode all received bids using the decode parameter for each bid amount in the tenderable range, starting with the highest bid amount and attempting to decode all bids using the decode parameter for that bid amount before moving on to the next highest bid amount and its corresponding decode parameter. Therefore, as shown in the drawing, the tender opening sub-system first obtains the decode parameter for the $100 bid amount and attempts to decode all bids using this decode parameter. For purposes of this example it is assumed that no bids of $100 were received. Consequently, the tender opening sub-system is not able to open any of the bids using the $100 decode parameter, which allows it to determine that there are no bids of $100

without decoding any of the bids. The tender opening sub-system then obtains the decode parameter for the next highest bid amount, in this case the $99 decode parameter, and attempts to decode all bids using this decode parameter. For purposes of this example it is assumed that one bid of $99 was received. Consequently, the tender opening sub-system is able to decode the $99 bid using the $99 decode parameter, allowing it to determine that the high bid is $99 without decoding any of the other bids. Thus the high bid is determined while maintaining the confidentiality of all of the other bids.

The claims correspond to the aforementioned technology as follows:

- Claims 9, 11 and 12 pertain to the processing performed in the bidder sub-system to encode a bid.
- Claims 10, 13 and 14 pertain to the processing performed in the tender opening sub-system to identify a winning bid.
- Claims 1-8 pertain to a system including both the bidder sub-system and the tender opening sub-system as described above.

6. Issues on Appeal

Applicant appeals the rejections of all claims over the Franklin reference because the following errors are made in the official action:

1) Limitations of the claims are disregarded when comparing the claims to the prior art reference.

2) The claims recite many features that are not taught or suggested by the prior art reference.

7. Grouping of Claims

Claims 1-8 stand or fall together.

Claims 9, 11 and 12 stand or fall together.

Claims 10 and 13-14 stand or fall together.

8. Argument

The official actions have repeatedly rejected the claims over irrelevant prior art. The rejections disregard and misinterpret claim limitations, resulting in the erroneous conclusion that the claims fit the prior art.

A. The rejections disregard and misinterpret the literal claim language

The official action misconstrues the claim language and assigns meanings to the claims that disregard their literal limitations and are contrary to the description of the invention provided in the application.

Applicant notes the following guidelines for claim interpretation which are set forth in the MPEP:

> The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. MPEP 2111
>
> Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their broadest reasonable interpretation. MPEP 2111.01
>
> Reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claims, is a quite different thing from 'reading limitations of the specification into the claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim. MPEP 2111

The official action has committed claim interpretation errors with respect to the following claim language:

1. First claim interpretation error

Claim 9 specifies:

> obtaining a code parameter ***associated with the chosen bid price*** from a ***predefined set of code parameters in which a different code parameter is associated with each of respective bid prices;***

> encoding the ***bid*** using the ***code parameter*** ... (claim 9; see also claim 1)

This claim language literally specifies:

1) that each ***bid price*** has an associated code parameter,

2) that the relationship between each bid price and its associated code parameter is ***predefined***, i.e., that the relationship between the bid price and code parameter exists independently of any particular bidder's bid,

3) that the code parameter is ***different*** for each bid price, and

4) the ***bid*** is a different thing than the ***code parameter*** that is used to encode the bid.

The official action does not acknowledge or give weight to these requirements of the claim. Rather, when setting out the prior art rejection, the official action addresses the claim as if there is no difference between a bid and the code parameter that is used to encode that bid. It does so by asserting that these claim requirements are met by the prior art technology merely because it involves a bid that identifies the bidder and the bid amount. The official action does not address the actual claim language, and instead states only that "this parameter would inherently be predetermined as the parameter corresponds to a particular bid as each bid would have an ASCII or HTML code associated with it (for both the amount and bidder)... " (official action, page 2). In the Response to Arguments, the official action explains what this means, stating that:

> As discussed above, the code would inherently be predetermined to correspond to a particular bid else the system would continuously need input to determine exactly how to code the bid. As to arguments that in the instant application the code corresponds to a bid and not a bidder, it would appear to the examiner to be the same thing as the bid corresponds to the bidder and thus, the code would correspond to both the bid and the bidder. (official action, page 4-5).

Thus it is the position of official action that the "code parameter" recited in the claim is simply a code (e.g., ASCII or HTML) that represents the bid, and that therefore any bid meets the requirements of the claim. This disregards the actual language of the claim, which makes a distinction between a ***bid***, and the

code parameter used to encode that bid. The literal language of the claim requires the specific actions of "obtaining a code parameter ***associated with the chosen bid price*** from a ***predefined set*** of code parameters ***in which a different code parameter is associated with each of respective bid prices***" and "encoding the ***bid*** using the ***code parameter***... ." These features must be given weight and must be met by prior art in order to sustain a prior art rejection. Reading the claim in light of the description provided in the application, it is clear that "code parameters" are encoding tools such as public keys, that each possible bid amount has its own unique corresponding code parameter, and that the code parameter to be used for encoding a particular bid is selected based on the bid amount. The official action errs by giving these limitations no weight. It is unreasonable to ignore the literal language of the claim itself, and by doing so the official action abandons its duty to apply the broadest ***reasonable*** interpretation when examining the claims.

A similar error is made with respect to claim 1, which recites the predefined set of code parameters and the use of those code parameters to encode a bid, in essentially the same manner as recited in claim 9.

2. Second claim interpretation error

Claim 10 specifies:

> obtaining a decode parameter that is ***associated with one of a highest and a lowest contract price candidate within a tenderable range of the contract*** from a ***predefined*** set of decode parameters in which a ***different decode parameter is associated with each of respective contract price candidates*** (claim 10; see also claim 1)

This claim language literally requires:

1) that each ***bid price*** has an associated decode parameter,

2) that the relationship between each bid price and its associated decode parameter is ***predefined***, i.e., that the relationship between the bid price and code parameter exists independently of any particular user's bid, and

3) that the decode parameter is ***different*** for each bid price.

The official action fails to give weight to these explicit requirements of the claim, and instead takes the position that any "code parameters would be inherently predefined, (such as ASCII or HTML codes), and further. ***[sic]*** There would be different codes for bidders and for bids, as both would have different objects encoded and these codes would inherently be associated with each other so that a winning bid would be related to a bidder to ascertain who won the bid." (official action, page 3). Again, the official action fails to distinguish between the ***bid*** and the ***decode parameter*** used to decode the bid. This contradicts the explicit claim language and the description of the invention provided in the application, which makes clear that ***decode parameters*** that have predefined associations with ***bid amounts*** are used in an attempt to decode ***bids***. The official action errs by giving these limitations no weight. It is unreasonable to ignore the literal language of the claim itself, and by doing so the official action abandons its duty to apply the broadest ***reasonable*** interpretation when examining the claims.

The official action also shows the error in its interpretation by stating that the claims are met by technology which uses "different codes for bidders and for bids." This requirement is not found in the claims. The requirements of the claims are clear on their face, and require only that the same code and decode parameters are used for a given bid amount irrespective of who the bidder is.

Similar errors are made with respect to claim 1, which recites the predefined set of decode parameters and the use of those decode parameters to decode bids, in essentially the same manner as recited in claim 10.

3. Third claim interpretation error

Claim 10 specifies:

> obtaining a decode parameter ...;
>
> attempting to decode each of the encoded bids ...;
>
> if at least one of the encoded bids is decodeable ... determining that the contract price is equal to a price of said at least one encoded bid;

> if none of the encoded bids is decodeable ..., obtaining a next decode parameter...;
>
> wherein ... bids are attempted to be decoded using successive decode parameters corresponding to successive contract price candidates... . (claim 10; see also claim 1)

The official action does not acknowledge the iterative bid-decoding process that is literally set forth in claim 10 using five separate clauses as shown above. In comparing these features to the alleged prior art, the official action merely states that the prior art includes "a decode parameter acquisition section and a determination section for decoding encoded bids ... " (official action, page 3). As seen below in the discussion of the prior art, the prior art does not utilize anything like the iterative bid decoding process required by the claims. Thus the rejection is premised on giving no weight to the explicit of the claim. It is unreasonable to ignore the literal language of the claim itself, and by doing so the official action abandons its duty to apply the broadest ***reasonable*** interpretation when examining the claims.

B. The Franklin reference does not teach or suggest the features required by the claims

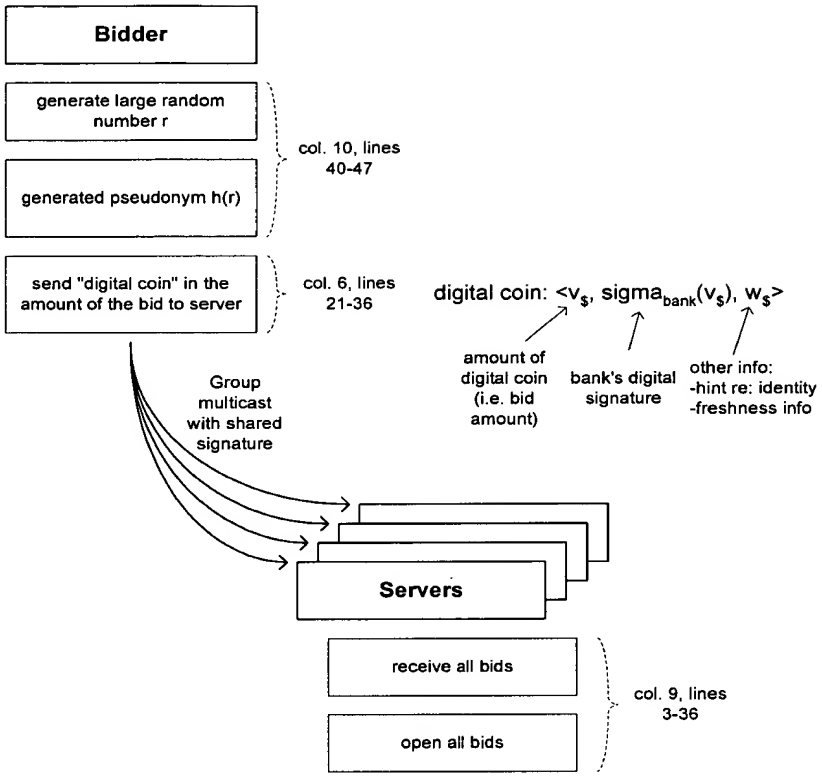
While Franklin discloses a system for submitting encoded bids, Franklin's system has virtually nothing in common with the claimed invention.

Applicant notes the following guidelines for prior art rejections which are set forth in the MPEP:

> A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131
>
> To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. ... All words in a claim must be considered in judging the patentability of that claim against the prior art. MPEP 2143.03
>
> [T]here must be some suggestion or motivation ... to modify the reference or to combine reference teachings. MPEP 2143

Franklin's system

The following illustration shows Franklin's basic system:



Franklin submits bids in the form of a "digital coin," which is a form of electronic money that Franklin describes at col. 6, lines 21-36. The bidder may avoid disclosing his identity by using a pseudonym generated from a random number. A piece of each bid is transmitted to a different server through a group multicast process, as described at col. 4, line 18 - col. 5, line 64, and at col. 8, line 47 - col. 9, line 2. The piece of the bid that is transmitted to a particular server S_i is encoded using that server's public key K_i (col. 7, lines 10-20; col. 8, lines 36-40). The pieces of the bids are received by the respective servers, decrypted, and shared to reconstruct each bid, as described at col. 9, lines 3-21. Bids determined to be invalid through this process are discarded. All bids are then opened and consistency among the portions is inspected, as described at col. 9, lines 22-36. Bids determined to be invalid through this process are also

discarded. The validity of the "digital coin" contained in each bid is then confirmed, as explained at col. 9, lines 7-53.

While Franklin's system is complex, it is sufficient for purposes of this appeal to recognize that Franklin validates bids using multicast, public and private keys, and digital coins, that the process involves opening all bids, that the process does not use code or decode parameters that are associated with specific bid amounts, and that Franklin does not perform an iterative decode process in which successive decode parameters for successive bid amounts are used in an attempt to decode all received bids.

Comparison of Franklin to present claims

Franklin does not have a predefined set of code parameters in which a different code parameter is associated with each bid, and Franklin does not use such a set of parameters to determine how to encode a bid. If Franklin had these features, then Franklin would describe a process in which a bid is produced by determining the amount of the bid, obtaining a code parameter that has a predefined association with that amount, and then encoding the bid using the code parameter. Franklin does not describe such a process. In Franklin, the bidder uses a server's public key to encrypt the part of the bid that is sent to that server, and the amount of the bid is not considered in determining the key used to encrypt the bid (col. 7, lines 10-20; col. 8, lines 36-40).

In the rejection of claim 9, the official action asserts that "obtaining a code parameter corresponding to the bid price" is taught at col. 10, lines 40-47, and that "the parameter would inherently be predetermined as the parameter corresponds to a particular bid." This assessment is incorrect. Col. 10, lines 40-47 state the following:

> A first requirement to achieving bidder anonymity is to remove the identity of the bidder at bidding terminals B_1, B_2, B_3 and B_n from the auction protocol of the preferred embodiment. A simple approach to achieve this is for each bidder, prior to submitting a bid, to generate a large random number r and use h(r) as a pseudonym for that bid, where h

is a message digest function. That is, a bid would be submitted in a multicast as denoted by 500 in Fig. 5.

This passage has nothing to do with a predefined set of code parameters in which a different code parameter corresponds to each bid price. There is no support in this passage or any other part of Franklin for rejection of claims including these features, such as independent claims 1 and 9 and their dependent claims.

Franklin also does not have a predefined set of decode parameters in which a different decode parameter is associated with each contract price candidate, and Franklin does not apply decode parameters associated with successive contract price candidates to all bids until at least one bid is decoded, making it the winning bid. If Franklin had these features, then Franklin would describe a process in which it is attempted to decode all bids by applying first one decode parameter, then the next decode parameter, and so on, where the decode parameters are selected based on the contract price candidates to which they have predefined relationships. Franklin does not describe such a process. Franklin's bid opening process is described under the heading "Opening The Bids" in col. 9. The process involves multiple servers performing a variety of tasks, one of which is implicitly the decoding of the encoded bids that are received by the server. But as noted above, the bids are encoded using public keys that are specific to individual servers, not to contract price candidates. Nothing in Franklin suggests that there is a predefined set of decode parameters corresponding to contract price candidates that is used in the bid opening process, and there is no reason to use such decode parameters since the bids were not encoded in a corresponding manner. Therefore there is no support in Franklin for rejection of claims including these features, such as independent claims 1 and 10 and their dependent claims.

In the rejections of claims 1 and 10, the official action asserts that selecting a decode parameter corresponding to a contract price candidate and

applying decode parameters corresponding to successive contract price candidates is taught by Franklin at col. 10, line 52 - col. 11, line 15 and in Franklin claim 10. This assessment is incorrect. Col. 10, line 52 - col. 11, line 15 states the following:

> The auction would then proceed as before, except that the winner would be announced by S_i as follows:
>
> aid,h(r),σ_{Si}(aid,h(r))
>
> Note that S_i, not knowing the identity or location of the bidder that submit the bid with pseudonym h(r), must simply broadcast the declaration of the winner. Alternatively, S_i could place this signed declaration in a location from which it could be later retrieved by the winning bidder. The winner can employ t + 1 such declarations and the number r, which only it knows, as its ticket for claiming the auctioned item.
>
> While at first this may seem to ensure the bidder's anonymity, other steps may be required due to the properties of off-line digital cash. As discussed before, off-line cash schemes require that the customer's (in this case, the bidder's) identity be embedded within the value $v_\$$ in a way that reveals this identity to the bank if the same coin is spent multiple times. Thus, with proposed off-line cash schemes, if a bidder were to submit the same coin to two auctions (e.g., submit the coin to one, lose the auction, and submit the coin to another), then the identity of the bidder could be inferred by a coalition of one faulty auction server from each auction. Perhaps even worse, if $\sigma_{bank}(v_\$)$is ever leaked to the coalition of faulty servers (e.g., due to a weakness in the procedures by which the coin is reconstructed and deposited after it wins the second auction), then they could deposit both uses of the coin, thereby revealing the bidder's identity to the bank and "framing" the bidder for reusing the coin. It is possible to modify proposed off-line cash schemes so that the identity information embedded in $v_\$$ is encrypted with a key known only to the bank and the bidder. Then, the bank's cooperation would be required to reveal the identity of the bidder. However, this approach still enables the coalition of auction servers to link the same coin, and thus the same (unknown) bidder, to both auctions, and does not prevent the "framing" attack described above.

It is clear that this passage has nothing to do with the feature for which it is cited, namely the use of a predefined set of decode parameters in which a different decode parameter corresponds to each contract price candidate, and a

process in which it is attempted to decode all bids using successive decode parameters that correspond to successive contract price candidates.

In its previous arguments, applicant pointed out that a beneficial feature of the claimed invention is that only the winning bid is decoded. In response, the official action stated:

> As to arguments that the instant application is different in that it only discloses the winning bid, applicant is directed to col 10, lines 3-4 of Franklin wherein Franklin discloses erasing losing bids and the information related to it, this would appear to be ***[sic]*** correspond to the instant application. ... Further, Franklin would inherently differentiate between bids ***[sic]*** to decide the winning bid it would open the bids and compare them to decide the winning bid. (Response to Arguments, page 5)

This statement shows that the official action misconstrues the claim language. In Franklin, bids are opened, and later they are erased. In the claimed invention, it is attempted to decode all bids, however only bids having the winning amount are actually decoded, resulting in the effect that non-winning bids are not decoded.

In its previous arguments, applicant also pointed out that in Franklin each bid is encoded differently using the bidder's encoding key, whereas the claim requires that each bid of the same amount is encoded using the same code parameter. In response, the official action stated:

> As to arguments that equal bids would be coded differently, while Franklin does not specify this is appears that the applicant does not either. Specifically, the differing bids would, of necessity, be coded differently as they are related to different bidders. If the bids were encoded only according to amount there would appear to be no way to determine the winning bidder as the bids would not be related to a bidder, therefore, it appears that identical bids would necessarily be encoded differently to separate bidders. The code for the amount would be coded the same, but the code for the bidder would necessarily be different. (Response to Arguments, page 5)

This statement shows that the official action is treating the ***bid information*** (e.g., the bidder, the amount bid) as if the bid information is what is referred to in the claims as a ***code parameter***. This is contrary to the claim

language and the description of the invention in the application. In accordance with the claimed invention, bids from two different bidders would be ***encoded using the same code parameter*** if they have bid the same amount. As explained in the application, coding is performed on bidding data using a specific code parameter, resulting in coded bidding data (page 5, lines 14-19). If a bid is successfully decoded, the bidder sub-system that submitted that bid is recognized as the winner (page 6, lines 2-8). Thus the identity of the bidder is not the same as the code parameter that is used to encode the bid. The rejection of the claims based on this proposition is error because it misconstrues the meaning of the claims and rejects them on that basis.

Therefore there is no support in Franklin for rejection of claims including these features, such as independent claims 1 and 10 and their dependent claims.

Applicants therefore request the Board of Appeals to overturn all prior art rejections based on the Franklin reference.

Respectfully submitted,

Date: 6-28-04

By #44,740

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Registration No. 36,489

APPENDIX

The following shows the present status of all claims:

1. (Previously Amended) An electronic tender system for accepting as a contract price the highest or lowest price among bids, comprising:

a bidder sub-system including:

a predefined set of code parameters in which a different code parameter is associated with each of respective bid amounts within a tenderable range,

a code parameter acquisition section for acquiring a code parameter from said predefined set of code parameters corresponding to a bid amount selected by the bidder sub-system within a tenderable range,

a code processing section for encoding the bid selected by the bidder sub-system using the acquired code parameter obtained by said code parameter acquisition section, and

a transmission section for sending a message including an encoded bid encoded by said coding section to a tender opening sub-system, and

a tender opening sub-system including:

a reception section for receiving messages from bidder sub-systems including encoded bids until a closing time,

a predefined set of decode parameters in which a different decode parameter is associated with each of respective contract price candidates,

a candidate price selection section for sequentially selecting contract price candidates beginning with one of a highest and a lowest within said tenderable range,

a decode parameter acquisition section for acquiring from said predefined set of decode parameters a decode parameter corresponding to a contract price candidate selected by the selection section, and

a determination section for decoding encoded bids using an acquired decode parameter corresponding to a contract price candidate selected by the selection section to determine whether a bid that is the same as the contract price candidate selected by the selection section exists among encoded bids received by the reception section.

2. (Previously Amended) The electronic tender system as claimed in claim 1, wherein the code processing section of the bidder sub-system encodes a bid value using the code parameter obtained by the code parameter acquisition section from the predefined set of code parameters, and

wherein the reception section of the tender opening sub-system includes a decoding section for sequentially decoding encoded bids received by the reception section using the decode parameter acquired by the decode parameter acquisition section from the predefined set of decode parameters, and a judgment section for judging that a coded bid is identical to a contact price candidate selected by the selection section when the decoding result is equal to a fixed value.

3. (Previously Amended) The electronic tender system as claimed in claim 1, wherein the predefined set of code parameters comprises respective public keys each corresponding to a different bid amount, and

wherein the decoding section of the tender opening sub-system performs a decoding operation using a the predefined set of decode parameters comprises respective secret keys each corresponding to the a respective one of the public keys corresponding to said different bid amounts.

4. (Previously Amended) The electronic tender system as claimed in claim 2, wherein the predefined set of code parameters comprises respective public keys each corresponding to a different bid amount, and

wherein the decoding section of the tender opening sub-system performs a decoding operation using a the predefined set of decode parameters comprises respective secret keys each corresponding to the a respective one of the public keys corresponding to said different bid amounts.

5. (Previously Amended) The electronic tender system as claimed in claim 1, wherein said tender opening sub-system includes an announcement section for announcing one of a portion of a decode parameter acquired by the decode parameter acquisition section and decoding results obtained in the determination section for each contract price candidate.

6. (Previously Amended) The electronic tender system as claimed in claim 2, wherein said tender opening sub-system includes an announcement section for announcing one of a portion of a decode parameter acquired by the decode parameter acquisition section and decoding results obtained in the determination section for each contract price candidate.

7. (Previously Amended) The electronic tender system as claimed in claim 3, wherein said tender opening sub-system includes an announcement section for announcing one of a portion of a decode parameter acquired by the decode parameter acquisition section and decoding results obtained in the determination section for each contract price candidate.

8. (Previously Amended) The electronic tender system as claimed in claim 4, wherein said tender opening sub-system includes an announcement section for announcing one of a portion of a decode parameter acquired by the decode

parameter acquisition section and decoding results obtained in the determination section for each contract price candidate.

9. (Previously Amended) A method for placing a bid for a contract, comprising:

choosing a bid price to be used in a bid;

obtaining a code parameter associated with the chosen bid price from a predefined set of code parameters in which a different code parameter is associated with each of respective bid prices;

encoding the bid using the code parameter associated with the chosen bid price in the predefined set; and

transmitting a message including the encoded bid to a bid receiving system.

10. (Previously Amended) A method for determining a contract price from received bids, comprising:

receiving a plurality of encoded bids for a contract;

obtaining a decode parameter that is associated with one of a highest and a lowest contract price candidate within a tenderable range of the contract from a predefined set of decode parameters in which a different decode parameter is associated with each of respective contract price candidates;

attempting to decode each of the encoded bids using the obtained decode parameter;

if at least one of the encoded bids is decodeable using the obtained decode parameter, determining that the contract price is equal to a price of said at least one encoded bid; and

if none of the encoded bids is decodeable using the obtained decode parameter, obtaining a next decode parameter from the predefined set of decode parameters that is associated with a next closest contract price candidate with respect to the highest or lowest contract price candidate within the tenderable

range of the contract, and attempting to decode each of the encoded bids using the next obtained decode parameter,

wherein said plurality of bids are attempted to be decoded using successive decode parameters corresponding to successive contract price candidates until at least one bid is successfully decoded.

11. (Previously Added) The method claimed in claim 9, wherein said predefined set of code parameters comprises respective public keys associated with each bid price in the set.

12. (Previously Added) The method claim in claim 11, wherein encoding a bid using the code parameter associated with the chosen bid price comprises encoding the bid using the public key associated with that bid price in the predefined set of code parameters.

13. (Previously Added) The method claimed in claim 10, wherein said predefined set of decode parameters comprises respective secret keys each associated with a corresponding public key used to encode bids of the associated contract price candidate.

14. (Previously Added) The method claim in claim 13, wherein attempting to decode each of the encoded bids using the obtained decode parameter comprises attempting to decode each of the encoded bids using the secret key associated with the contract price candidate.